

IN THIS ISSUE... THREE PHOTOS OF SPACE SHUTTLE ACTIVITY... ENJOY!!



BADGER STATE Smoke Signals

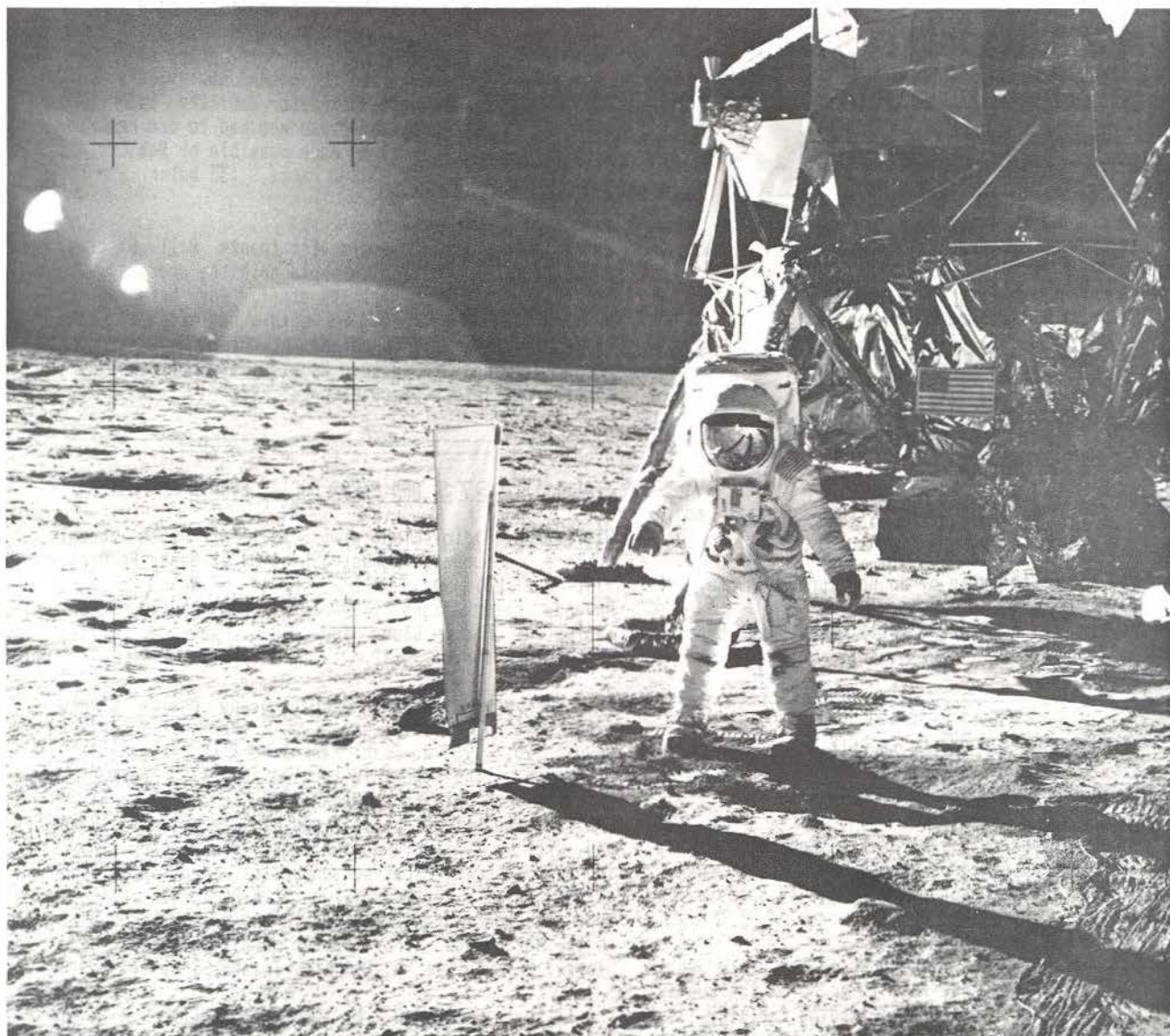


Serving Amateur Radio in Wisconsin

Published Monthly Since 1969

Vol. 14 No. 8 - 174th Consecutive Monthly Issue - Baraboo, Wis.- August, 1984

THE UNITED STATES IN SPACE... BADGER STATE SMOKE SIGNALS SALUTES
THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA), ON THE
FIFTEENTH ANNIVERSARY OF THE FIRST MANNED LUNAR LANDING (APOLLO 11)!



This photograph was taken during the Apollo 11 Extravehicular Activity (EVA). The Eagle (LEM) landed on the moon at 3:20 p.m. CDT, July 20, 1969. NASA Photo.

Badger State Smoke Signals supports: The American Radio Relay League (ARRL) - The Wisconsin Nets Association (WNA) - The Wisconsin Association of Repeaters (WAR) - The Amateur Radio News Service (ARNS)
GEARVAKf (The 'f' is silent)

Badger State Smoke SignalsOfficers:

Ken Ebner, K9EN, Chairman
 Jim Romelfanger, K9ZZ, Editor
 Jim Decker, WB9UQT, Treasurer

Send editorial material and
 exchange papers to:

Jim Romelfanger, K9ZZ, Editor
 Rte. 1, Box 770
 North Freedom, WI 53951-9799

Subscriptions:

1 yr. \$ 6.00
 2 yr. 11.50
 3 yr. 17.00

to:

Badger State Smoke Signals
 Jim Decker, WB9UQT, Treasurer
 P.O. Box 337
 Baraboo, Wisconsin 53913-0337

Send address corrections and
 changes to:

Kenneth A. Ebner, K9EN
 822 Wauna Trail
 Portage, Wisconsin 53901

Permission is granted to re-
 print items from BSSS provid-
 ing credit is given to the
 author and Badger State Smoke
 Signals.

Additions and corrections:

A couple of additions and corrections to last month
 BSSS Barneveld story.

Add to the roster the name of Jo Ann Turner, N9CXW.

Also change the name in the article to Fred Haring,
 KF9U.

OUR NASA PHOTOS MADE POSSIBLE in this issue by these
 kind folk, whom we thank greatly. Without their help,
 we simply wouldn't have been able to do this...

Cover Photo: Sponsored in part by Bill Schuette, who is
 himself an avid supporter of the exploration of space.
 Bill is a TV service technician at Vodak TV Sales, 404
 Oak Street, Baraboo.

Page Three photo: Safing operations on the Space Shut-
 tle Challenger are underway in this scene on the runway
 at the Kennedy Space Center (KSC) landing facility (in
 Florida.) This early morning landing marked the first
 touchdown of a Space Shuttle flight in Florida (just a
 short distance from its launch pad.) Publication of
 this photograph made possible by Bob Wilson, who puts
 in many, many hours at Scherschel Camera Shop, 129 4th
 Street, Baraboo.

Page Five photo: A different way to look at the
 world... Astronaut James van Hoften and a repaired

satellite are in this wide panorama and recorded on
 film with a Linhof camera, making its initial flight
 aboard a Space Shuttle. Dr. van Hoften is getting in
 his first "field" test of the manned maneuvering unit
 (MMU) after months of training in an underwater facility
 and in a simulator on Earth. The Solar Maximum
 Mission Satellite (SMMS - "Solar Max"), revived and
 almost ready for release into space once more, is
 docked at the flight support system (FSS.) The remote
 manipulator system (RMS) is backdropped against the
 Earth. Outside of pictures made of the Earth by Astro-
 nauts on the way to the moon, this photo, showing the
 planet from 285 nautical miles, represents the highest
 orbital photography in the manned space program. Publi-
 cation of this photo made possible by the good people
 at Troyer Drug, 106 4th Avenue, Baraboo.

Page Seven photo: Astronaut Bruce McCandless II, one of
 two 41-B mission specialists participating in an his-
 torical Extravehicular Activity (EVA), is a few meters
 away from the cabin of the Earth-orbiting Space Shuttle
 Challenger in this 70-mm frame. This spacewalk rep-
 resented the first use of a nitrogen propelled, hand
 controlled device called the manned maneuvering unit
 (MMU), which allows much greater mobility than that
 afforded previous spacemen who had to use restric-
 tive tethers. Publication made possible by Bob Lee and
 the good folk at P & B Auto Parts, 133 Water Street,
 Baraboo.

Badger State Smoke Signals also thanks Bill Bastian,
 N9BDE, for his help in the photo printing process.. and
 we thank NASA, and all its staff, for bringing to
 reality the opportunity to be in a position to take
 these pictures, and to do all the things they're doing
 - and will do - in space. We wish NASA continued suc-
 cess in our future space efforts! k9zz

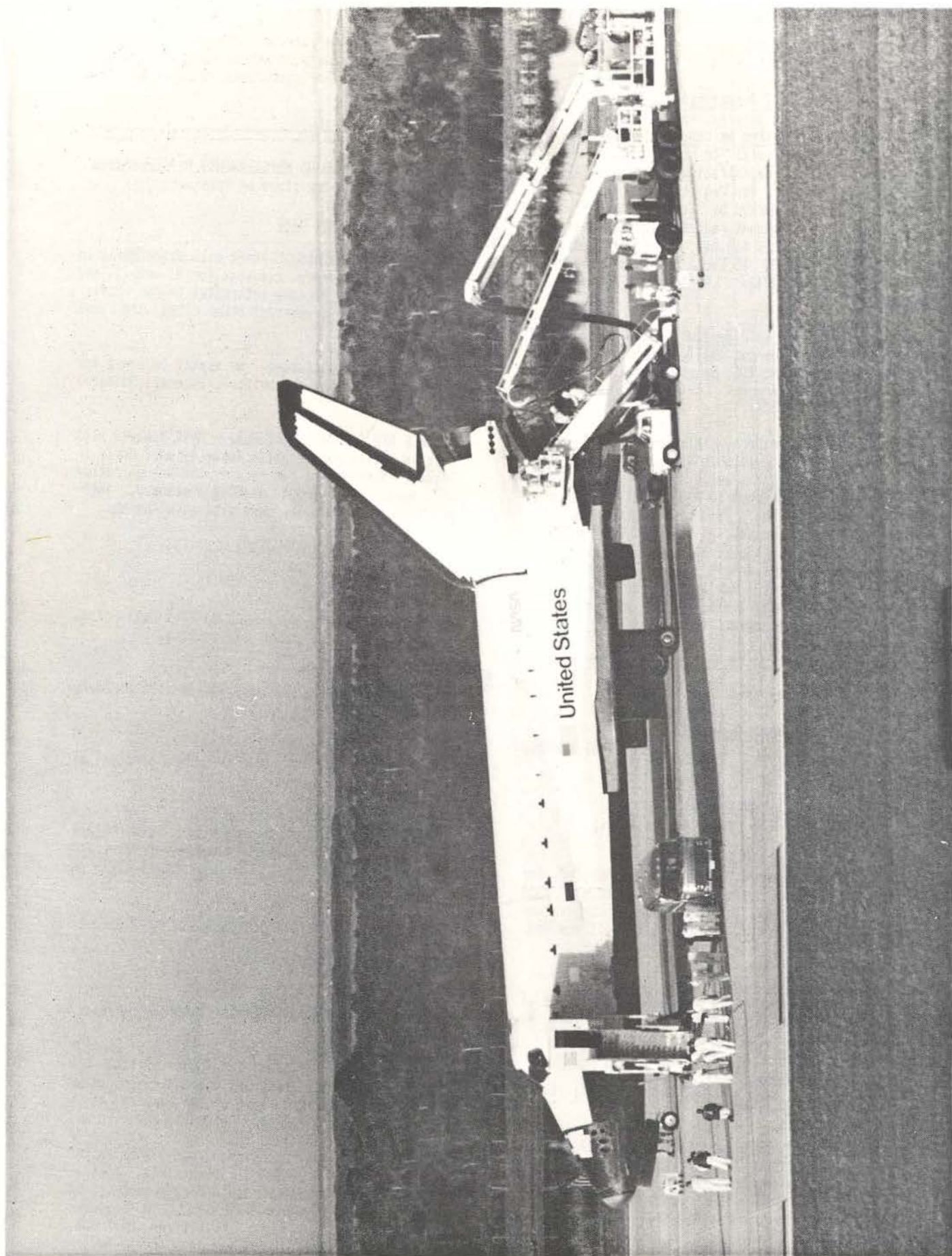
SHAPFESTS AND OTHER SOCIAL EVENTS

Hamfesters Radio Club will hold their 50th annual
Hamfest on Sunday, August 12, 1984 at Santa Fe Park,
 91st and Wolf Rd., Willow Springs -- Near Chicago.
 Advance reservations \$3.00 or \$4.00 at the door.
 Hamfesters Radio Club, Inc., P.O. Box No. 42792,
 Chicago, Illinois 60642.

The Northwoods Amateur Radio Club and Oneida County
ARES will be jointly sponsoring a Hamfest Saturday,
 August 25, 1984 at South Park School in Rhinelander,
 Wisconsin. The school is located at 511 S. Pelham in
 Rhinelander. This is on Highway 17, one block north of
 the junction with Highways 8 and 47. Tickets are \$2.00
 and will be available at the door. Tables are free!
 (on a first-come, first-served basis). Doors will open
 at 9:00 a.m. Auction will be at 2:00 p.m. Combine
 your vacation and an eyeball with the friendliest Hams
 in the Northwoods. For further details, contact Mike
 Hamman, KA9BHL, Rte. 5, Box 668, Tomahawk, WI 54487.

The Illinois State A.R.R.L. Convention will be held on
 Sunday, August 26, 1984 at the Kane County Fairgrounds
 Exhibition Hall in St. Charles, Illinois. Admission:
 \$2.00 advance or \$3.00 at the gate. SASE to Jerry
 Friedes, W9ZGP, 1501 Molitor Road, Aurora, IL 60505.
 Commercial and Flea Market: George R. Isely, WD9BIB,
 736 Fellows St., St. Charles, IL 60174.

The Wisconsin Nets Association annual Picnic will be
 held on September 15, 1985 at North Wood County Park



near Wisconsin Rapids, WI. Refreshments available. Bring your own food. Camping is available. Further details will be here next month.

The Northern Illinois DX Association once again invites all Amateurs with an interest in DX to attend the annual W9DXCC DX Convention on Saturday, September 15, 1984. The location will be the Holiday Inn in Glen Ellyn, IL. One registration covers the full day including the banquet. The registration is \$19.50 for the Early Bird-- Postmarked by Sept. 8, 1984. and \$22.50 thereafter. Banquet registration for the non-ham spouse/guest is only \$15.00. Registration: to Howie Huntington, K9KM, 65 South Burr Oak Drive, Lake Zurich, Illinois 60047. Make check payable to "W9DXCC".

Radio Expo 84 will be held September 22nd and 23rd at the Lake County Fairgrounds, (halfway between Milwaukee and Chicago) Rts. 45 and 120, Grayslake, IL. \$4.00 for both days, \$3.00 in advance. Radio Expo, Box 1532, Evanston, Illinois 60604.

As a service to our readers, this section of Badger State Smoke Signals is available without charge to list your upcoming Swapfest, Hamfest, dinner, picnic, party or other event of interest to Radio Amateurs in Wisconsin and nearby areas. Send information on your event to Kenneth A. Ebner, K9EN, 822 Wauona Trail, Portage, WI 53901. In addition, space is available at attractive rates on our advertising pages, and/or we can include your flyers. For information on rates and requirements for our advertising pages, and/or for including flyers, please contact K9ZZ or K9EN.

CLUB MEETINGS:

Kettle Moraine Radio Amateurs:

All meetings are held on the SECONDD (2nd) Friday of each month.

Madison Area Repeater Association

Next meeting will be September 10, 1984.

Milwaukee Radio Amateurs Club:

All regular meetings of MRAC are scheduled for 1984 at Wauwatosa Savings and Loan Building, 7500 West State Street, will be held on the second Thursday of the month. Sep. 13, Oct. 11 and Nov. 8.

West Allis Radio Amateurs Club

Regular meetings are held on the second Tuesday of each month at St. Francis Savings, 9330 W. Greenfield Ave., at 8:00 P.M.

The Wisconsin Nets Association

Annual picnic will be held September 15, 1984. Details elsewhere in BSSS.

The Wisconsin Valley Radio Association (Wausau)

holds regular monthly meetings on the first Tuesday of the month at 7:30 p.m. The location varies, but information is available on the 146.04/64 repeater in Wausau.

Yellow Thunder Amateur Radio Club: (Baraboo, WI)

All regular meetings of YTARC are held in room 34 of the Baraboo Civic Center. Aug. 16, Sep. 17, Oct. 16, Nov. 14, Dec. 13.

Let us know of your club meeting dates and we will let others know of your meetings and activities. There may be Amateurs in your area interested in joining your club or members of other clubs interested in making an interclub visit.

MISCELLANEOUS MISCELLANEOUS MISCELLANEOUS MISCELLANEOUS
Oh what the heck -- a few items of interest:

Milwaukee Radio Amateurs Club HAMATEUR CHATTER

MRAC License Training Classes will start early in September, Wednesday evenings for 12 weeks, and are open to ALL persons interested in our hobby. Non-members and members of other clubs are most welcome.

In our 1984 Fall classes, we expect to teach for all grades, Novice, Technician, General, Advanced and Extra.

ADVANCE REGISTRATION REQUIRED. MRAC members will receive class registration forms by mail early in August. Non-members can receive the school notice and registration form by sending a stamped, self-addressed #10 large business size envelope to:

MILWAUKEE RADIO AMATEURS CLUB INC
N50 W1632B Pin Oak Court
Menomonee Falls, WI 53051

Classes are held in the Wauwatosa East High School Building. There is ample free parking.

Wisconsin Nets Association

For news of the WNA, see the WNA section of Smoke Signals.

Yellow Thunder Amateur Radio Club, Inc.

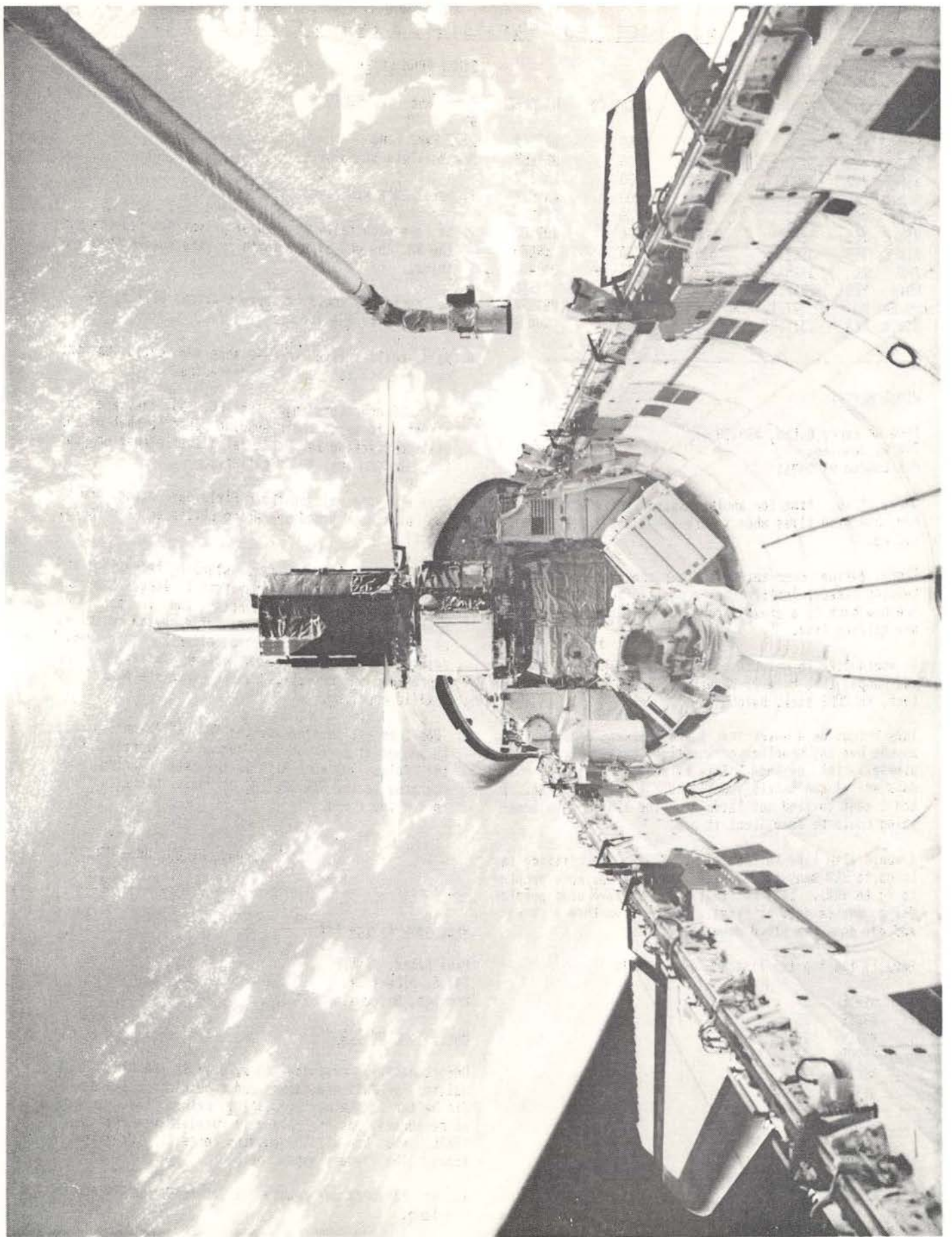
For news of the YTARC, see the YTARC section of Smoke Signals.

Our thanks to the above-mentioned clubs, and their bulletins, for the information presented. Badger State Smoke Signals will be pleased to exchange bulletins and information with your club. Please contact K9ZZ or K9EN.

HAMS STRUCK BY MYSTEROUS AILMENT From GEARVAKF Bulletin

By Dr. Hanson Strangeplazes, GEARVAKF Medical Director

The first case was reported as a 27 year-old Amateur Radio operator (general class) was found sitting upright at his equipment, his hand suspended just above the straight key, his other hand on the receiver dial. His face was dull and lifeless, failing to react to any outside stimulus. While this is a common condition of the Radio Amateur, it became unusual because he failed to react to a DX call. Asked to investigate, I diagnosed the condition as "rigmortis," a catatonic state brought on by continuous exposure to CW. In advanced cases, we have seen complete disorientation, high SWR, and even burned out finals. If you know anyone experiencing these symptoms, please send information to "STIFF", c/o Lishnus General Medical Center Mount, Vemin, OH 45323.



WISCONSIN NETS ASSOCIATION LTD.

WISCONSIN NETS

NET	WNA	FREQ	UTC	LOCAL CDT	MANAGER
BWN	YES	3984	1100Z	0600	WD9IID
BEN	YES	3985	1700Z	1200	WB9ESM
WSBN	YES	3985	2230Z	1730	WA9ZTY
WNN	YES	3723	2300Z	1800	KA9DBP
WSSN	YES	3645	2330Z	1830	KC9CJ
WIN-E	YES	3662	0000Z	1900	WB9ICH
WIN-L	YES	3662	0300Z	2200	K9LGS
XPD	NO	3925	1731Z	1231	WA9YVC
NMTN	YES	.34/.94	2330Z	1830	N9BDL
GR.BAY	NO	.72/.12	THU 0145Z	2045 WED	WB9NRK
WCWTN	YES	.31/.91	2330Z	1830	N9AUG

EIGHT FROM LATE:

Denny Rybicki, K9LGS
NM - WIN/L
2332 Park Lane
New Holstein WI 53061

1. Help! Late WIN needs check-ins.
2. We are especially in need of prompt net reports for the NM. The end of the month is here faster than you think.
3. We certainly could use more stations willing to go to 9RN or to SSD the following day.
4. We'd really like to see some new calls on the roster-- and not just from upgrading.
5. Our NCS operators enjoy fast CW, but they are instructed to match their sending speed to that of the station checking in. Don't let a little rust on your key make you shy. We're patient.
6. Hope everyone enjoyed their Field Day outing. Now we can use those honed operating skills on the nets, right?
7. Sometimes, in this age of outstanding technology and automatic equipment, we may tend to forget that the main ingredient in good nets-- and in all good operation--- is the operator. Let's remind ourselves of this important concept by offering some well-deserved compliments to the ops we admire, and by improving our own skills as we serve the public by traffic handling.
8. Don't forget to schedule the WNA PICNIC on Sept. 15 as a special event on your summer's calendar. Meet the folks you work with in the nets. Bring your concerns to the WNA meeting at the picnic site. Hope to see you there.

WIN/E REPORT:

From NM Larry Guthu, WB9ICH
706 W. Jennings
New London WI 54961

Here it is, time for another installment for WIN/E.. boy, how time flies when you're busy! Let's see what we can do.

Since taking over in April, our checkins have been holding steady. Traffic took a small dip in May, but we are now back to a steady trend. Other than that, things are holding fine.

I would like to welcome back to the net Ralph, K9BED, and hope that he will be with us for a long time to come. WELCOME back, Ralph.

This brings up a point that I can't stress enough.. If anyone has any problems or questions on WIN/E, please, please.. let me know. This is part of my job as Net Manager. I can't help you if I don't know about it. I don't want to find out later down the line, when something could be done about it now.

I would also like to thank Jim, W9CXY, for filling in to go to 9RN many times. We could use a few more people to go to 9RN.. it's not that hard. We have some people doing double duty at times.. let's give them a break and get some new blood down there.

Here is the top ten list for June - QNI:

N9BDL	27	
W9CBE	25	
W9YCV	24	(tie)
KA9DBP	24	(tie)
W9CXY	21	
WB9ICH	19	
KC9CJ	16	
W9OT	13	
K9BDF	12	
KZ9V	11	
AB9G	9	

Well, I guess that is about it for this time. Let's keep up that WINing spirit, and hope to see a lot of you at the picnic in September.

73, Larry, WB9ICH, WIN/E Manager

Denny, K9LGS, NM - WIN/L

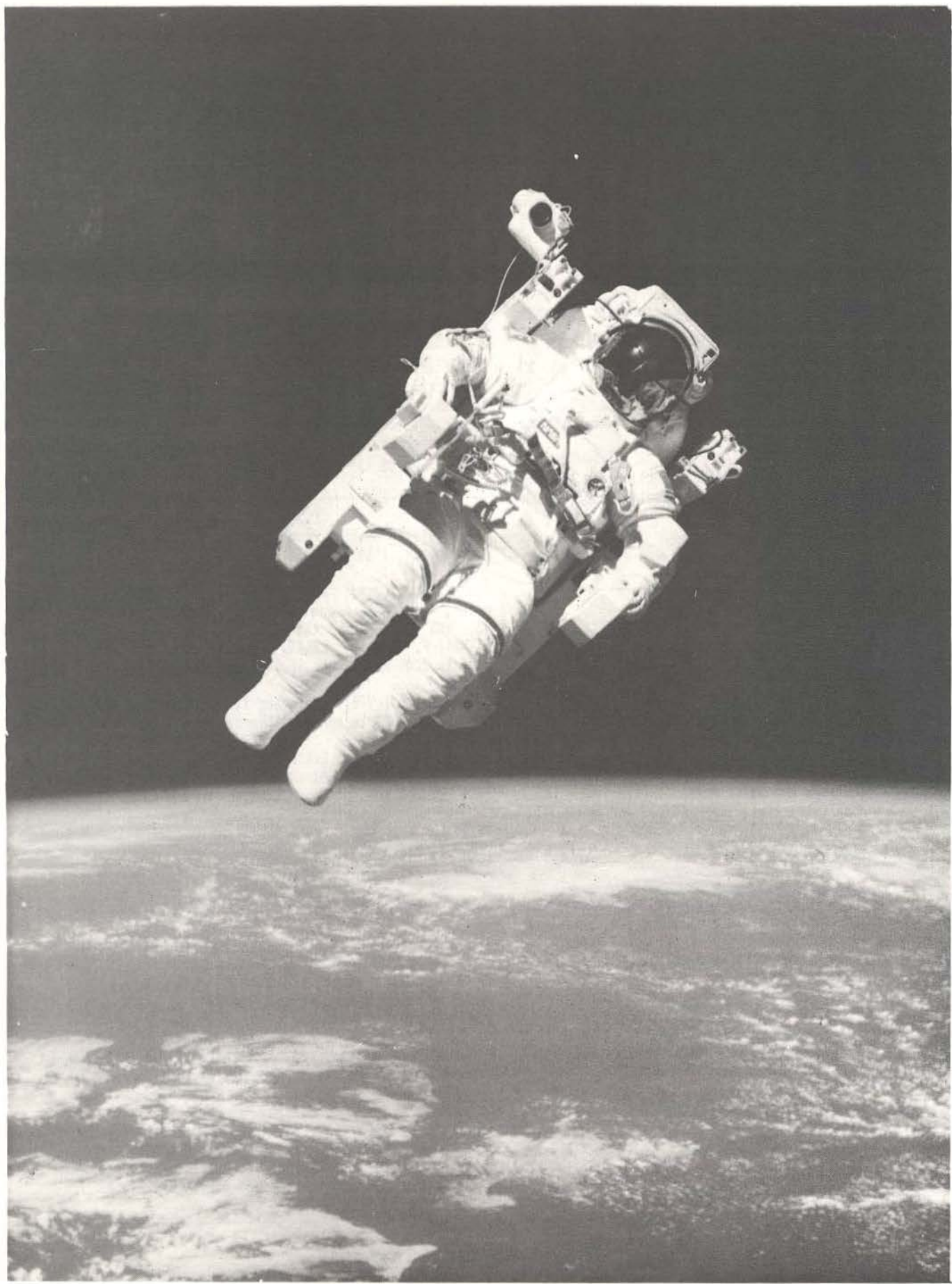
Wisconsin Novice Net

Paul Amend, KA9DBP
547 E. Albert St.
Portage, Wisconsin 53901

How's Your CW I.Q.?

Unfortunately, response to my quiz in the March 1984 edition of BSSS was rather underwhelming. I guess we did better in the way of quality, rather than quantity, of responses, as the only quiz received was from Lee, N9BDL, who had all the answers correct. Congratulations! The answers appear below.

1. At 13 words per minute, a dot is 96 milliseconds long.
2. The spacing between parts of a letter should be 86 milliseconds long.



3. The spacing between letters should be 288 milliseconds long.
4. The spacing between words should be 672 milliseconds long.
5. A dash is 288 milliseconds in duration.
6. The world's record for copying CW is 75.2 WPM.
7. The "Q" signal which means "send more slowly" is QRS.
8. The abbreviation TMW means Tomorrow.
9. The holder of the world's speed record for copying CW is Theodore R. McElroy.
10. The receive bandwidth necessary to copy CW at 25 WPM is 100 Hertz.
11. The code speed requirement for the Amateur Extra Class License is 20 WPM.
12. The "Q" signal QLF means (per N9BDL), "Turn off the radio, N9BDL is sending with his left foot again (yet, still)."

So there you have it. CU WNN.....73 de KA9OBP/NM

SILENT KEY:

We are sorry to report the death of John Holzer, KC9KQ, of Platteville.

John was active in many phases of Amateur Radio, and was particularly busy with traffic handling. He was active in the MNA and in MARS. John was a top-rate CW operator, and one would never have been able to tell he was paralyzed from the waist down. Talking with John was always a spirit-lifting experience, and he will be greatly missed.

-k9zz

(Thank for info to N9BYK and the Great River Amateur Radio Club Newsletter. The sale of KC9KQ's equipment is being handled on a sealed-bid basis by Mel, WD0AQS. No info on equipment being sold is available, nor is Mel's address.)

ARRL BULLETIN NR 60 - From ARRL Headquarters, Newington CT, July 21, 1984 - To All Radio Amateurs BT

The American Radio Relay League is now a Volunteer Examiner Coordinator. On July 12, the Commission ruled on Docket 84 265, permitting recoupment of expenses by VECs.

In anticipation of this, ARRL had filed its petition to become a VEC on June 27. On July 21, culminating more than two years of intensive planning and preparation, representatives of the ARRL and the FCC signed a memorandum of agreement at the ARRL National Convention in New York City.

The agreement authorizes the ARRL to accredit volunteer examiners and coordinate giving upgrade exams in each

of the 13 FCC-defined regions. The ARRL will now proceed on its announced course of action, coordinating Technician, General, Advanced and Extra Class exams at hamfests and conventions in September and October.

Beginning in November of this year, ARRL will coordinate exams at any location. Sponsors must register their intent with the ARRL VEC Office, 225 Main Street, Newington, CT, 06111, at least 75 days in advance.

The thousands of Advanced and Extra Class licensees who have applied to serve as Volunteer Examiners with the ARRL should complete and return their application materials to HQ as soon as possible. They will be accredited and sent credentials in time for the first ARRL coordinated exam sessions in September.

To determine when exams will next be given in your local area, check hamfest and convention brochures for September and October. Your FCC Field Office has exam schedule information for all VECs. An article on taking exams under the Volunteer Examiner Program will appear in an upcoming issue of QST. AR

ARRL Bulletin NR 58 - From ARRL Headquarters, Newington CT, July 20, 1984 - To All Radio Amateurs BT

The FCC released, on July 20, a second Report and Order, on the HF phone band expansion Docket number 82 83, and also granted the petition, RM 4228, filed by Randall F. Soball, KH6XX, allowing phone operation on 7075 to 7100 KHz in the State of Hawaii.

Effective 0001 UTC, September 1, 1984, these will be the new HF radiotelephone subbands:

3750 to 3775 KHz	Extra Class
3775 to 3850 KHz	Advanced and Extra Class
3850 to 4000 KHz	General, Advanced and Extra Class

21200 to 21225 KHz	Extra Class
21225 to 21300 KHz	Advanced and Extra Class
21300 to 21450 KHz	General, Advanced and Extra Class

28300 to 29700 KHz	General, Advanced and Extra Class
--------------------	-----------------------------------

With regard to the 40-metre band, FCC concurs with ARRL that phone band expansion here would be detrimental to CW operations. However, the Commission will allow phone operation on 7075 to 7100 KHz in Hawaii and other areas near Region 3, and Alaska.

Remember that these new phone privileges are not available until 0001 UTC, September 1, 1984.

In summary, the Commission adopted the plan as submitted in the ARRL's comments, with the addition of expanded phone operation at 7075 to 7100 KHz in certain geographic areas near Region 3. Details will be in the next issue of the ARRL Letter and September QST. AR

WANT ADS

For Sale: Kenwood TS-830, with mike and manual. Excellent condition. Asking \$800.00. Bill Adelman, WD9HMM, 641 North Walnut, Reedsburg WI 53959. (608) 524-3872.

For Sale: Teletype Corporation Model 15 KSR teleprinter with table. Also RTTY terminal unit (TU). TU uses Exar 2206 and 2211 chips (Function Generator for AFSK and PLL demodulator.) TU has mark hold and autostart. Loop supply also included. Ideal way to start on VHF RTTY. You pick up, or we can make arrangements. Asking \$60.00 for the works. Jim Romelfanger, K9ZZ, Rte. 1 Box 770, North Freedom WI 53951-9799. Reachable on Baraboo 28/88. Gimme a call; pick up and haul. I have no telephone.

For Sale: Complete station package. Hallicrafters FPM-300; has been updated by a Hallicrafters technician. Package also includes Dentron antenna tuner, MFJ keyer, MFJ CW filter and Radio Shack SWR/power meter. Asking \$400.00. Ed Statz, WD9ESJ, Rte. 3 Box 154A, Baraboo WI 53913. (608) 522-4950.

Your ad can run here!! For a paltry fifty cents a line, you, too, can advertise in Badger State. Ship your ad copy and your remittance to Keeper of the Funds, Jim Decker, P.O. Box 337, Baraboo WI 53913-0337.

While you're at it, why not include enuf funds to become a subscriber, if you are not already receiving BSSS every month? Subs: 1 Year - \$6.00. 2 Years - \$11.00. 3 Years - \$17.00. Ship to the same venerable and durable Keeper of the Funds.

BADGER STATE SMOKE SIGNALS - WE MAKE AN ISSUE OF IT... TWELVE MONTHS A YEAR!!

C'mon now, gang... What do you say? Sit right down.. subscribe today!!

jim k9zz

One of every four Amateurs is mentally ill!
If three of your friends are ok, you are in trouble.

Why is the grass dangerous?
"It is full of blades."

---PHD News

WHERE'S THE BEEF? (A filler swiped from "The Sine of the Times", Indiana County (PA) ARC...

What does it cost to tell you about that beef? Last year, the 3 big names spent over \$871,000 a DAY!! (I'll bet that's more than you spend a year on hamburgers!) Mc Donalds: \$186 million; Burger King: \$82.5 million; Wendy's: \$50 million. The trend seems to be toward more gourmet shops.. you know, quality 'burgers! One has glass walls to see the pats being made, plus the smell of buns baking. Well... steak, anyone? (DE Sheldon Davis, W3FVU)

SOVIET HIGH-TECH RIPOFF FOILED!

WASHINGTON (BS) - State Department officials here today announced that a pre-dawn raid has netted another shipment of a highly complex electronic component destined for the Soviet Union.

The super-sophisticated "7400 Quad Two-Input Nand Gate," as it is known in elite industry jargon, could have been used in video games, officials said, adding that the shipment had an estimated "street value" of at least \$10 million.

Other top officials, speaking under the condition that they not be identified, said the parts were worth about \$1,000 apiece. "At least that's what we pay for them through the Pentagon's spare parts procurement program," commented one official.

Later reports from knowledgeable sources said that the "7400" components are manufactured in hidden factories in exotic jungle locations such as Malaysia and Puerto Rico and are blatantly sold over-the-counter in Radio Shack stores within blocks of the Soviet Embassy.

"With enough of these super-hi-tech parts, the Soviets could have constructed the world's fastest video game," said one spokesman. "Such a game would be superior to current American and Japanese models because it would also serve as an excellent space heater, and we all know how cold Moscow winters are."

Commenting on the raid, an obviously pleased President Reagan said, "It is obvious that one of America's greatest assets is its large pool of skilled youngsters ready to take the controls when the nation constructs its sophisticated space-based laser ICBM defense system. This technology would have given the Soviets the capacity to train THEIR youngsters to shoot down OUR missiles."

(Ripped off from "Packet Status Register" for June, 1984. Thanx to them!! k9zz)...

WE GET LETTERS

State of Wisconsin
Office of the Governor

July 13, 1984

Mr. Jim Romelfanger, K9ZZ
Editor

Dear Mr. Romelfanger:

Thank you for your letter about the Wisconsin Amateur Radio Operators. I enjoyed the article you included from Badger State Smoke Signals about the Governor's Conference on Disaster Preparedness.

I also enjoyed visiting with several Ham operators at the Conference in April. At that time, I indicated the importance of assistance from Amateurs during emergency situations. In light of your organization's response to the recent disasters in Barneveld and the surrounding area, I would like to commend those members who volunteered their time and equipment, and thank them on behalf of the state. Your actions reaffirmed my confidence in the Wisconsin Amateur Radio Operators.

Thanks again for writing, and best wishes to you.

Sincerely,

/signed/ Anthony S. Earl
GOVERNOR

YELLOW THUNDER AMATEUR RADIO CLUB

The July 11, 1984, meeting of the Yellow Thunder Amateur Radio Club, Inc. was called to order in room 34 of the Baraboo Civic Center by President Art Kleefisch, W9WSS, at 7:31 p.m. Duane Grotophorst, KA9HKL, was appointed by Art to act as secretary in the absence of the regular secretary.

The following members were present:

Art Kleefisch	W9WSS	Baraboo
Norm Gade	K9ELK	Reedsburg
Harry Mayland	K9FFT	Baraboo
Jim Decker	WB9UQT	Baraboo
Duane Grotophorst	KA9HKL	Sauk City
Jim Romelfanger	K9ZZ	North Freedom
Pete Sweeney	WD9JIB	Reedsburg

The minutes of the previous meeting were read, and the Treasurers report was accepted. The balance in the operating account is \$55.17, with a total in all accounts of \$295.17.

The following items were discussed, with no membership action taken at this time:

- Fund raising - possibility of a raffle.
- Fish Fry - late Sept. target date.
- Success of Circus Parade Communications.
- Possibility of holding classes in fall.
- Placing a booth at the County Fair in future.
- Announcing meeting in papers and on radio.
- Upcoming 15th Anniversary of YTARC.

Buck-Night drawing was won by Harry Mayland, K9FFT.

The meeting was adjourned at 9:25 p.m.

— respectfully submitted by
Duane Grotophorst, KA9HKL, acting secretary.

The program following the meeting was a NASA film, "NASA Moon Landing" from the Public Library obtained by Jim Romelfanger, K9ZZ, with the help of Everett Yost, KB9X1.

September 28, 1984 has been set as the date for the annual YTARC Fish Fry. It will be held at Pierce's Supper Club in Baraboo as it has been for the past several years. Full details will appear in next months BSSS.

The next meeting of the Yellow Thunder Amateur Radio Club, Inc. will be held August 24, 1984, in room 34 of the Baraboo Civic Center in Baraboo, Wisconsin. The program will be on basic sine waves. Covered will be r.m.s., average, peak, transformers, rectifiers, battery charging, etc. The program will be conducted by Art Kleefisch, W9WSS.

DURLIN'S ARC

Durlin Cox (ex-WA9JDW), of rural Baraboo, sez he has an Open House coming up in mid-September, at his firm, Resonance Research, north of Baraboo.

Resonance Research is engaged in the manufacture of Tesla coils and other related items. They are all spectacular! Durlin is a graduate Physicist, and received his degree from the University of Wisconsin - Madison. When he powers up one of his biggie coils, it's a lot of light and a lot of noise, too. Many, many megavolts of lightning... and earplugs are recommended, too.

Durlin also is involved in research of high-voltage and related phenomena, and makes periodic treks around the country, giving talks and presenting papers.

Durlin is a walking encyclopedia when you ask him about the inventor of the coil named for him - Nikola Tesla. Coils weren't Tesla's only invention, either. Durlin sez Tesla even managed to burn up a power generation station while running an experiment in Colorado, and it's also understood that Tesla had developed a method of transmitting electrical power.. without wires. Tesla also managed to create an earthquake in Manhattan.. without explosives.

Durlin sez the more, the merrier, for the Open House. Resonance Research is on Shady Lane Road, just a bit east of Sauk County Trunk A, about five miles north of Baraboo. We'll have the dates for the Open House in September BSSS. Hope to see you there!

jim k9zz

THE FOLLOWING RADIO AMATEURS PROVIDED COMMUNICATIONS for the Baraboo Circus Street Parade, held 7 July 1984:

Norm Gade, K9ELK, Reedsburg
Ken Ebner, K9EN, Portage
Jim Anderson, N9AGH, Madison
Jim Lackore, AD9X, Cross Plains
Steve Polishinski, WB9VSD, Madison
Paul Amend, KA9OBP, Portage
Ron Armstrong, WB9WRW
Tim Hendricks, WB9ZKU
Pearl Capello, WB9BZC
Jim Sarbacker, WD9GUT
Art Kleefisch, W9WSS, Baraboo
Peter Sweeney, WD9JIB, Reedsburg
George Halper, W9SUF, West Allis
Jack McLeland, W9ATK, Milwaukee
Dave Birdsall, N9BYK, Madison
Tom Luck, WB9BPS, Baraboo
Bob McGinnis, KB9AP
Jim Decker, WB9UQT, Baraboo
John McGinley, N9BBN

Some of the above operators are from the Milwaukee area, and thanks are extended to them for bringing a portable repeater to use during the parade.

Communications were provided, on July 21 and 22, for the Antique Transportation Meet, in La Rue. Helping were:

Bernie Heinemann, WA9YDW
Barb Heinemann, WB9HXA
Pete Sweeney, WD9JIB
Jim Decker, WB9UQT
Art Kleefisch, W9WSS
Bill, KA9OTV

ITEMS... Coming from one Steve Polishinski, WB9YSD, residing in Madison:

The next Teleconference Radio Net (TRN) is scheduled for Friday, 14 September 1984. The topic will be on "Microphone Equalization for Radio Communications" by Bob Nail, K9EID.

Wisconsin repeaters which air these nets are:

Madison	--	146.76
Manitowoc	--	146.94
Milwaukee	--	145.13
Mausau	--	146.82

Badger State is unaware of other Wisconsin repeaters which carry the TRN. If there are others, or if these listings are incorrect, please drop a note to K9ZZ, address on page 2.

NEW 220 REPEATER IN MADISON

Madison is now blessed with a 220 machine courtesy WB9RSD. The machine has been operating since July 14, 1984 at 3:10 AM. It is a Melcor repeater, with 25 watts out into a Hustler 67-220 antenna at a whole 40 feet at Chris's house. Plans are to make the machine into a remote link. It will be an experimental type of system. The range is the Madison city area with a mobile, and HT coverage is difficult. The output frequency is 223.82 MHz., with input down 1.6 MHz. as is the standard offset on all 220 repeaters.

--WB9YSD

Steve Polishinski, WB9YSD, announces the HAM RADIO AND STEREO FIX AND REPAIR DAILY SHOP!!!! Cheap rates!!!! Steve lives near the U.W. Campus in Mad City... If your radio or stereo is busted, call Steve at (608) 257-3060!!!! When your radio's busted, Steve can be trusted!!!! The HAM RADIO AND STEREO FIX AND REPAIR DAILY SHOP!!!! Even if your rig is flat, your wallet won't be!!!! A sigh of relief you'll heave.. when you entrust your gear to Steve!!!!

BOOKS: FRANK TALK

By John W. Frank WB9TQB
P.O. Box 5113
Madison WI 53705

"Better Shortwave Reception 5th Edition"

By William Orr and Stuart Cowan
Published by Radio Publications, Inc.
160 Pages (Paperback) \$5.95

This book may be of particular interest to Hams who are also shortwave listeners. Although much of the material in the two chapters on receivers is based on tubes and discrete components, the basic receiver principles can still be applied to solid-state equipment.

Readers whose main interest is DX may be especially interested in the chapter on propagation. VHF enthu-

siasts might be pleased to note that there are two chapters devoted to the frequencies above 30 MHz.

The chapter headed "Reception Techniques" contains several suggestions on how to obtain a confirmation of your reception. (My own experience has shown that some international shortwave stations do send picturesque "QSL" cards to their listeners.)

Who would I recommend this book to? Anyone who wants to learn about propagation, international broadcasting, and the hobby of shortwave listening. All could probably learn something from this book.

...John W. Frank WB9TQB

(This got to Editor W3FVU via Ken, W3AEN)

WARNINGS!!! If you use any kind of equipment which uses those small "wafer" batteries (such as some cameras, some hearing aids, etc.), KEEP THOSE BATTERIES WHERE KIDS CAN'T FIND THEM! One couple's child swallowed one, and the result was destruction of the child's throat from the alkaline chemicals in the battery. When you discard any batteries like those, be certain they are tossed where the kids can't find them!

From "The Washington Post" (A neat item stolen shamelessly from "The Sine of the Times," Indiana County (PA) ARC...)

This is a REAL ad from their ad pages:

1. Must be able to tell time.
2. Must have hair short enough to see and hear.
3. Must know address or make and model of car you are living in.
4. Must have shoes and trousers.
5. All nose and earrings must be light enough not to interfere with your work.
6. Must be able to go 8 hours without drugs or alcohol.
7. Must know left from right, right from wrong, and be able to use a phone.
8. Must be able to check the gas and oil in a vehicle.
9. Must be able to drive from Manassas to Centerville non-stop.
10. Must be able to gulp down a sandwich in thirty minutes, and be able to work at least thirty minutes without going to the restroom or drinking something.

..If you can qualify, and need employment, please call between 9 a.m. and 5 p.m.

BASICALLY SIMPLE...

Submitted by Larry Perry, KA3JGN, in "The Sine of the Times," Newsletter of the Indiana County Amateur Radio Club, Indiana, Pennsylvania, and shamelessly swiped therefrom...

This program is for a five element Yagi to be built for UHF/VHF.. and it works pretty good. The program is in BASIC, and should adapt easily for any computer you have for home use. Most of the changes will be in the spacing of the characters (: , ; etc.), and possibly the INPUT statement as I have to use the colon at the end of mine (:).

The CALL CLEAR command clears my screen. Also, you may shorten the program somewhat by combining statements suchg as (PRINT,PRINT). You will note that this program gives the results in inches.

73, Larry

```
10 REM UHF/VHF YAGI ANTENNA DESIGN
20 CALL CLEAR (Note: For the TRS= CLS)
30 PRINT "UHF/VHF YAGIS"
40 PRINT "-----"
50 PRINT
60 PRINT
70 INPUT "WHAT FREQUENCY (MHZ) DO YOU WANT TO FIGURE
  THE ANTENNA FOR?":F
80 PRINT
90 PRINT "FOR";F;"MEGAHERTZ"
100 PRINT "THE LENGTHS OF THE ELEMENTS ARE:"
110 PRINT "ELE. NMBR.", "LENGTH IN INCHES"
120 PRINT "-----", "-----"
130 L=5600/F
140 Z=((5600/F-1)-(5600/F+1))/2
150 R=(L*.05)+L
160 D(1)=L-(L*.05)
170 D(2)=D(1)-Z
180 D(3)=D(2)-Z
190 PRINT "1 REFLECTOR",R
200 PRINT "2 DRIVER",L
210 PRINT "3 DIRECTOR 1",D(1)
220 PRINT "4 DIRECTOR 2",D(2)
230 PRINT "5 DIRECTOR 3",D(3)
240 S=.2*L
250 PRINT
260 PRINT "SPACING OF ELEMENTS: ";S;"INCHES."
270 BL=1.14*L
280 PRINT
290 PRINT "BOOM LENGTH IS: ";BL;"INCHES."
300 END
```

(Note: Badger State makes dutiful inspection of these programs for typos, but we can't guarantee 'em. Happy computing... k9zz)

From FOXTALES

You, Your Antenna, and Safety...from Cushcraft Corp.

Each year, hundreds of people are killed, mutilated or receive severe permanent injuries when attempting to install an antenna. In many of these cases, the victim was aware of the danger of electrocution, but did not take adequate steps to avoid the hazard.

For your safety, and to help you achieve a good installation, please read and follow the safety procedures -- *They May Save Your Life.*

1. If you are installing an antenna for the first time, for your own safety, as well as for others, seek professional assistance. Consult your dealer. He can explain which mounting method to use for the size and type antenna you are about to install.
2. Select your installation site with safety as well as performance in mind. Remember - Electric powerlines and telephone lines look alike. For your safety, assume that any overhead lines can kill you.
3. Call your electric power company. Tell them of your plans and ask them to come look at your proposed installation. This is little inconvenience, considering your life may be at stake.
4. Plan your installation procedure carefully before you begin. Successful raising of a mast or tower is largely a matter of coordination. Each person should be assigned to a specific task, and should know what to do and when to do it. One person should be designated as the "boss" of the operation to call out instructions and watch for signs of trouble.
5. When installing your antenna, remember, *Do Not* use a metal ladder. *Do Not* work on a wet or windy day. *Do* dress properly, shoes with rubber soles and heels, rubber gloves, long-sleeve shirt or jacket.
6. If the assembly starts to drop, get away from it and let it fall. The antenna, mast, cable and metal guy wires are all excellent conductors of electrical current. Even the slightest touch of any of these parts to a power line completes an electrical path through the antenna and the installer -- *That's You!*
7. If any part of the antenna system should come in contact with a power line - *Don't Touch It Or Try To Remove It Yourself. Call Your Local Power Company.* They will remove it safely.
8. If an accident should occur with power lines, *Don't* grab hold of the person in contact with the antenna and power line or you, too, could be electrocuted. Use a dry board, stick, or rope to push or pull the victim away from the antenna. If the victim has stopped breathing, after moving, administer artificial respiration and stay with it. Have someone call for medical help.

WHOOOPS!!! Almost forgot.

YTARC BIRTHDAZE!!!

Jim Decker	WB9UQT	August	16
Ken Johnson	K9DZG	August	25

Badger State Boosters



PORTAGE, WI



Since 1954



AFFILIATED WITH



THE ORIGINAL MIDWINTER SWAPFEST

WAUKESHA EXPOSITION CENTER
HIGHWAYS F & FT
WAUKESHA, WISCONSIN

WAARC SWAPFEST
P.O. Box 1072
MILWAUKEE, WISCONSIN 53201



Radio Shack

VODAK TV SALES

COLOR TV • B & W TV
TOP TUNES • RECORDS • LP • STEREO
TV ANTENNA SYSTEMS • CB • SCANNERS

We Stock
COMPUTERS

Antenna Wire and Insulators
Coaxial Cable and Connectors
Coaxial Adapters

404 Oak Street

PHONE 356-6666

BARABOO, Wis. 53913

We now sell & install Satellite TV systems

HAM IT UP EVERY SPRING

MADISON SWAPFEST

DANE COUNTY EXPO CENTER
FORUM BUILDING

Sponsored By MARA WB9AER

Box 3403 - Madison, Wis. 53704

AMATEUR ELECTRONIC SUPPLY®

4828 W. Fond du Lac Avenue

Milwaukee, WI 53216

Phone: (414) 442-4200

Wisconsin WATS: 1-800-242-5195

(Call TOLL FREE outside of Milwaukee Metro area)

HOURS: Mon. thru Fri. 9-5:30; Sat. 9-3

SOUTH MILWAUKEE AMATEUR RADIO CLUB

SWAPFEST

Held Every July

American Legion Park

Shepard Ave. Oak Creek, WI

South Milwaukee ARC

P. O. Box 102

South Milwaukee, WI 53172



SUPERMARKETS INC.

When in the Area Shop Our Baraboo, Portage
North, Portage Downtown, Pardeeville and
Fox Lake Wisconsin Stores.



• LARSEN •
MOBILE & BASE ANTENNAS

Roy L. Rossen, Jr.
5909 Malabar Ln.
Madison, WI 53711

W9IAU
(608) 271-2177

608-742-8345

Portage, WI 53901

SAM'S

"Radio Shack"
DEALER

THE BIGGEST NAME IN LITTLE COMPUTERS®

Wide Selection of Electronic Parts

Northridge Shopping Center

Hwy. 51 North

KODAK
DISC
Camera

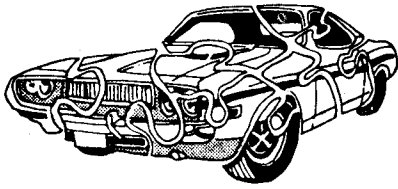
SCHERSCHEL
CAMERA
SHOP

129 4TH ST.
BARABOO, WI. 53913

356-9165

Complete Stock of Darkroom
Chemistry and Materials

Badger State Boosters



P & B AUTO PARTS

P. O. Box 190 133 WATER ST.
BARABOO, WISCONSIN 53913



ORGANS - PIANOS - TV - STEREO

Sales and Service

Hays Music Store

Lyle "Jeff" Hays, Prop.

PORTAGE, WISCONSIN

VIDEO TAPE CLUB

305 DeWitt St.

Phone 742-3344

PIERCE'S Supper Club

LUNCHEONS • DINNERS
Your Favorite Cocktail
Private Rooms For
Weddings - Parties
Banquets - To 300 +
Business Meetings

FOR RESERVATIONS

Call 356-5122

Bus. U.S. 12 - Circus City - BARABOO



CHECK OUT OUR...
**EVERYDAY
LOW PRICES**

Darrow's

COUNTRY MARKET

TOTAL DISCOUNT FOODS

935 8th Street • Box 90

Baraboo, Wisconsin 53913

356-2106

We Buy Aluminum Cans



© Where the customer is the company

BARABOO FARMERS UNION

CO-OP

Feed, Seed, Fuels, Farm Supplies

BARABOO, WISCONSIN

356-6636

TURNER'S

Broadway Liquor Mart

And Self-Serve

Beer - Liquor - Wine

GAS

805 Broadway

Baraboo, Wis. 53913

356-9488

Baraboo Floral Company

FLOWERS FOR ALL OCCASIONS

BUY FROM A GROWER

We wire flowers almost everywhere

PHONE 356-5336 - WE DELIVER



1406 East Street

Baraboo, Wisconsin 53913



**Giegerich's Sons
Inc.**

514 Park Avenue

PRAIRIE DU SAC, WISCONSIN 53578

"Sauk Prairie's Quality Printers
and House of Office Supplies"

LEISURE WORLD

125 Fourth Street

Baraboo, Wis. 53913

356-5280

BETA AND UHS MOVIE RENTALS

VIDEO CASSETTE RECORDERS

T. V.—RADIOS—COMPUTERS & SOFTWARE

T. V. & RADIO REPAIR

TROYER *Rexall* DRUGS

JACK D. TROYER, R.P.H. DAVID M. FUHS, R.P.H.

106 - 4th AVE. PHONE 356-4964

BARABOO, WISCONSIN

"Good Health Is Our Business"

WE MAINTAIN A COMPLETE RECORD OF ALL
YOUR FAMILY'S PRESCRIPTION PURCHASES

BADGER STATE SMOKE SIGNALS

SUBSCRIPTION INFORMATION

Dear Fellow Radio Amateur:

If you are not regular recipient of Badger State Smoke Signals, this sample copy is to introduce our publication to you and invite you to join our regular readers. Smoke Signals has been published monthly for over 14 years. Originally published as the club paper for the Yellow Thunder Amateur Radio Club, it has been for the past two years a state-wide publication.

Badger State Smoke Signals will carry current Amateur Radio news, news about YTARC, WNA, ARRL and other clubs and groups in Wisconsin as well. You will be kept apprised of what is happening in our hobby - locally, regionally, nationally and around the world. Among the many features will be Sentence Sermons, member birthdays, swapfest calendar, ARRL section news, humor and excellent feature articles by well-known Amateurs in Wisconsin and elsewhere. Reports will be included from ARRL Bulletins, ARRL Newsletters, and Westlink Reports, along with items of interest from exchange newsletters and the ARNS.

Regular individual subscription rates:

1 year	-	\$6.00 (12 issues)
2 years	-	\$11.50 (24 issues)
3 years	-	\$17.00 (36 issues)

If you wish to subscribe, please use the form below. Make checks or money orders payable to Badger State Smoke Signals. Send this form to Jim Decker, WB9UQT, Treasurer, P.O. Box 337, Baraboo, Wis. 53913.

In addition to the above rates, a special reduced rate is available to clubs having 20 or more subscriptions per year at a rate of \$4.50 each.

Clubs wishing to participate in Badger State Smoke Signals with a column devoted to their club can receive a lower rate. Mailings must be made to the entire club membership and your club would receive a 15 percent additional complimentary mailings. (There are presently over 85 complimentary and exchange addresses on the mailing list in addition to the present subscribers.)

Less than 50 members	\$3.60 per year
Over 50 members	\$3.00 per year

Badger State Smoke Signals would be happy to serve your members as the official journal for your club. For information and requirements please contact Ken Ebner, K9EN, 822 Wauona Trail., Portage, Wisconsin 53901 -- (608) 742-3560.

-----rip here-----

Jim: Enclosed is my check/money order for \$ _____. Please enter my subscription to Badger State Smoke Signals for _____ years.

Name _____ Call _____

Address _____

City _____ State _____ Zip _____

BADGER STATE SMOKE SIGNALS
Jim Romelfanger, K9ZZ, Editor
(see page two for exchange address)

BULK RATE
U.S. POSTAGE
PAID
PERMIT # 265
PORTAGE WI 53901

return address:
Kenneth A. Ebnetter, K9EN
822 Wauona Trail
Portage, Wisconsin 53901

When I receive a greeting card
No other course sffices
Except to peek upon the backshoe.
To find out what the price is.
-- Philip Lazarus

DATED MATERIAL -- PLEASE DON'T DELAY

RETURN POSTAGE GUARANTEED
ADDRESS CORRECTION REQUESTED

THIRD CLASS MAIL